



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Docket Number (Optional)

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]

Application Number

Filed

Signature.

Debra L. Pejeau

First Named Inventor

Xin Jin, et al.

Art Unit

2863

Examiner

Tung S. Lau

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☒ attorney or agent of record. 47,919
Registration number

☐ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34

Signature

Joseph M. Sauer

Typed or printed name

(216) 586-7506

Telephone number

Date _____

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 555255-012578

Group Art Unit: 2863)
)
Examiner: Tung S. Lau)
)
Inventor: Xin Jin, et al.)
)
Serial No.: 10/668,763)
)
Filed: September 23, 2003)
)
For: System and Method of)
Battery Capacity Estimation)
)

**PRE-APPEAL BRIEF
CONFERENCE REQUEST**

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on March 14, 2006.

By Debra L. Bejeau

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

The patent owner hereby requests review of the Final Rejection of the above-captioned application prior to filing an appeal brief for the reasons set forth below. The patent owner submits that the Final Rejection is based upon clear errors in fact and fails to establish a *prima facie* rejection.

REASONS FOR PRE-APPEAL CONFERENCE REQUEST

Independent claims 23, 37 and 48 stand rejected under 35 U.S.C. 102(b) as being anticipated by Rompe (U.S. 5,903,856). The patent owner traversed these rejections in an Office Action Response dated November 16, 2005. In a Final Office Action dated December 19, 2005, the Examiner renewed the 102(b) rejections, finding the patent owner's arguments to be unpersuasive. The patent owner submits that the rejections of at least independent claims 23, 37 and 48 are based on an incorrect interpretation of the cited Rompe reference and are thus based upon clear errors in fact. Moreover, the patent owner further submits that the Final Office Action wholly fails to show correspondence between the Rompe reference and each element of at least independent claims 23, 37 or 48, and therefore fails to establish a *prima facie* showing of anticipation under 35 U.S.C. § 102(b).

CLEAR ERRORS IN FACT

As explained in the November 16, 2005 Office Action Response, independent claims 23, 37 and 48 are patentably distinct from the Rompe reference. Each of the independent claims recite steps for estimating the battery capacity in a mobile device. Significantly, the Rompe reference does not disclose any means for estimating or otherwise determining battery capacity, let alone the very specific systems and methods recited in claims 23, 37 and 48.

The differences between the Rompe reference and each of claims 23, 37 and 48 are too numerous to restate in their entirety within this document, and the patent owner therefore refers the Panel to the prior Office Action Response for a more detailed analysis. A summary of the most stark differences is set forth below for the convenience of the Panel.

The Rompe reference discloses a device that uses a movement sensor to monitor and record the movement of materials during transport. (*See*, Rompe, col. 1, line 6-67.) In addition, the Rompe reference discloses a method for changing the operational state of the movement sensor based on a measured loaded voltage (ULSENS) of the battery in order to account for the reduced capacity of the battery at low temperatures. (*See*, Rompe, col. 2, line 33-39.) The Rompe reference does not, however, disclose any method for measuring or otherwise deducing battery capacity. Nor does the Rompe reference disclose any means for calculating an unloaded battery voltage from measurements of the loaded battery voltage, as recited in the independent claims.

With reference to Figure 4, the Rompe reference describes that as a measured loaded battery voltage (ULSENS) falls below certain limiting (threshold) voltages (U1-U5), the device transitions from "normal operation" mode to "reduced power operation" mode to "suspend power operation" mode, and eventually to "ultimate sleep mode." (*See*, Rompe, col. 6, line 18 - col. 7, line 22). Each successive operational mode requires less energy consumption from the battery. Figure 4 of Rompe illustrates how a no-load battery voltage (ULADU) and a loaded battery voltage (ULSENS) may vary over time and temperature, and how this variation causes the device to transition between the operational states (U1-U5). Significantly, there is absolutely no suggestion in Figure 4 (or Figure 5), or within the corresponding written description, as to how any battery capacity value may be estimated from this information or how a present unloaded voltage may be calculated from a measured unloaded battery voltage.¹ The conclusions of the

¹ The Rompe reference suggests at column 6, lines 20-23 that it would be advantageous to adapt power consumption based on the available capacity or the measured voltage. However, the Rompe reference does not provide any further detail regarding how power consumption might be adapted based on available capacity. Rather, the only description provided in Rompe relates to how to adapt power consumption based on the measured voltage (i.e., by transitioning between states U0-U5 based on the measured battery voltage under load (ULSENS)).

Final Office Action relating Figures 4 and 5 of Rompe to the very specific steps recited in claims 23, 37 and 48 for estimating battery capacity are therefore clearly based on an erroneous interpretation of the Rompe reference.

For example, independent claim 23 recites a method of estimating a usable battery capacity for a mobile device that includes numerous steps, such as "determining a present unloaded battery voltage based on the present unloaded battery voltage and one or more operating condition," "determining a present battery capacity using the present unloaded battery voltage," "determining an operational threshold capacity using the unloaded operational threshold voltage," and "estimating the usable battery capacity based on the present battery capacity and the operational threshold capacity." Significantly, claim 23 recites the determination of three different types of battery capacities: a present battery capacity, an operational threshold capacity, and a usable battery capacity. The Final Office Action inexplicably points to Figures 4 and 5 of the Rompe reference as corresponding to these claim limitations, even though the Rompe reference does not disclose how to calculate even a single battery capacity value, let alone three different battery capacity values. The patent owner is therefore unable to comprehend how the Final Office Action purports to find correspondence between the Rompe reference and these limitations of claim 23 based solely on the illustrations shown in Figures 4 and 5, which have nothing at all to do with battery capacity. Similar deficiencies are also found in the rejections of independent claims 37 and 48, as explained in detail in the prior Office Action Response. These rejections are unquestionably based on clear errors of fact, and cannot stand.

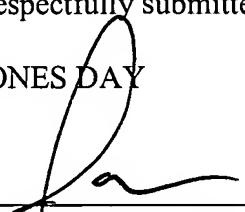
FAILURE TO ESTABLISH A PRIMA FACIE REJECTION

In addition to the reasons stated above, the rejections of independent claims 23, 47 and 48 are improper because the Examiner has failed to establish that the cited Rompe reference anticipates each element of the claims. The Final Office Action repeatedly points to Figures 4 and 5 of Rompe as corresponding to numerous claim limitations, without even attempting to explain how these limitations are taught by Figures 4 or 5 and without citing to any support from Rompe's written description. As explained above and in the prior Office Action Response, the Examiner is clearly attempting to read far too much into Figures 4 and 5 of the cited reference. The patent owner therefore submits that the Final Office Action fails to show correspondence between the Rompe reference and each element of the rejected independent claims, and thus fails to make out a *prima facie* showing of anticipation under 35 U.S.C. 102(b). *See*, MPEP 2131.01 ("To anticipate a claim, the reference must teach every element of the claim.")

For at least the above reasons, the patent owner respectfully submits that the pending claims are allowable, and requests the withdrawal of the rejections and the allowance of the pending claims.

Respectfully submitted,

JONES DAY



Joseph M. Sauer (Reg. No. 47,919)
Jones Day
North Point, 901 Lakeside Avenue
Cleveland, Ohio 44114
(216) 586-7506